UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT ARIZONA STATE OFFICE

In Reply Refer To: 6840 (932) P

June 29, 1999

EMS TRANSMISSION - 7/2/99 Instruction Memorandum No. AZ-99-018

Expires: 9/30/00

To: Field Managers

From: Acting State Director

Subject: Southwestern Willow Flycatcher Action Plan

DD: 9/30/00

Attached is the subject action plan. This action plan further implements commitments made in IM No. AZ-98-001, *Conservation Measures for Southwestern Willow Flycatcher*, *Cactus Ferruginous Pygmy-Owl, Kearney's Blue Star, and Pima Pineapple Cactus*. It is incorporated as part of the proposed action in the section 7 consultations on most land use plans and grazing EISs in Arizona. The action plan was prepared at the direction of the State Leadership Team (SLT) after presentation of a status report on the earlier draft at the April 7, 1999, SLT meeting in Safford. It has been modified based upon Field Office comments on the draft.

We would like to extend our sincere appreciation to members of the team that developed the earlier drafts: Michael Herder, team leader, Dave Smith, Jim Gacey, Elroy Masters, Dave Krueper, Tim Hughes, Susanna Henry, Bill Grossi, and Paul Sawyer.

Implementation of this action plan must become a part of our basic operations in Arizona BLM. If you have any questions, please contact Ted Cordery at (602) 417-9242.

SIGNED BY:
GARY D. BAUER
ACTING STATE DIRECTOR

AUTHENTICATED BY:
SANDY BAUSMAN
STAFF ASSISTANT

Attachment 1 - Southwestern Willow Flycatcher Action Plan (15 pp.)

SOUTHWESTERN WILLOW FLYCATCHER ACTION PLAN

Bureau of Land Management-- Arizona

June 17, 1999

The Bureau of Land Management (BLM) in Arizona committed via Instruction Memorandum No. AZ-98-001, to developing and implementing an action plan for the southwestern willow flycatcher (SWIFL) that provides protective guidance for managing flycatcher habitat and implementing BLM-authorized activities. This action plan provides guidance to Arizona BLM Field Offices for implementing decisions authorized in their respective planning documents (Resource Management Plans, Management Framework Plans, and associated grazing EISs). Features of this Action Plan were included as conservation measures in the proposed actions of our section 7 consultations with the Fish and Wildlife Service (Service) on the above plans and EISs and must be implemented in order for us to remain ESA-compliant.

Our conservation objectives for the SWIFL on public lands are three-fold:

- Ensure that the SWIFL is protected on suitable-occupied habitat.
- Ensure suitable-unoc cupied habitat remains suitable for SWIFL nesting.
- Ensure that potential habitat is allowed to become suitable for the SWIFL.

The Action Plan consists of four major action categories and an implementation schedule. When the Recovery Plan is finalized for the SWIFL, or when new information becomes available that should change our management, we will update this Action Plan.

Mapping SWIFL Habitat

Maps must be developed that convey the following information about flycatcher habitat managed by each Field Office:

- Location, size, shape, and spacing of habitat areas.
- Habitat stage with respect to flycatchers according to the following classification: suitable-occupied, suitable-unoccupied, suitable-unsurveyed, and potential.
- Status of flycatcher surveys for each area of suitable habitat: either the date(s) surveyed or indication that the area has not been surveyed.

A habitat mapping system has been developed for identifying the suitability of riparian areas as SWIFL habitat. Mapping can be conducted at any time of year, but should usually be avoided during the SWIFL breeding season in areas that may be suitable due to concerns over take. Careful mapping, while performing SWIFL inventory or monitoring with a valid FWS permit, could be a cost savings. The process of conducting SWIFL habitat mapping is discussed in Attachment 1.

Flycatcher Occurrence Surveys

Develop and maintain a list of areas to be surveyed along with the anticipated completion date or actual completion date for the survey of each area. The purposes for surveys may be many. They include identifying whether take could occur due to BLM actions or authorizations, identifying a baseline for later monitoring, or improving our knowledge about the status of the species in a particular area. Surveys may not always be necessary in all suitable habitats everywhere. Because surveys are labor-intensive, managers have the flexibility of assuming SWIFL presence in suitable habitat, if necessary. Managers should keep in mind that the need to make certain decisions may warrant determining if an area is occupied. Priorities should be based upon potential for conflicts or effects to the SWIFL or its habitat, and any existing biological opinions.

Conduct occurrence surveys for SWIFLs according to the protocol described by Sogge *et al.* 1997. In the event that agency cooperators develop new or modified protocols in the future, this plan calls for the use of the most current accepted methodology. All BLM personnel involved in SWIFL surveys **must** take the FWS-sponsored training course and secure a federal permit to conduct surveys prior to doing taped play backs in the field. Habitat patches are considered surveyed only when the established survey protocol was correctly used. Areas with suitable habitat that are not surveyed with this protocol are considered suitable unsurveyed habitat until the first survey is completed.

All suitable and historically occupied habitats should be surveyed as soon as possible to minimize the area managed under the more restrictive guidelines given below and to limit the number of Section 7 consultations. Although public land administered by BLM should normally be the target, habitat affected by BLM actions could be surveyed to help determine BLM's effects. We need not, however, survey for birds on lands where we do not have landowner permission.

Following detection of a SWIFL, monitoring in the form of follow-up occurrence surveys should be conducted annually unless no surface disturbing or habitat modifying activities are authorized within five miles of the suitable-occupied patch. Occurrence surveys should be conducted annually in suitable-unoccupied habitat if activities that could take SWIFLs are ongoing. Other monitoring such as nest monitoring may be warranted depending upon projects proposed, decisions needed, and uses in the area.

Habitat monitoring should be conducted such that BLM can ensure habitat remains suitable or that potential habitat is trending toward suitability.

Habitat Management Guidelines

Suitable- Occupied habitat or unsurveyed suitable habitat:

• Exclude livestock during the breeding season (April 1-September 1) in order to ensure take due to livestock grazing activities does not occur.

• Evaluate other new or existing BLM plans, authorizations, or activities to determine whether they may affect SWIFL. Take steps to benefit SWIFL if practicable. Make adjustments to avoid adverse effects, including take of the species. Monitor to ensure adjustments are effective. If no alternative to adverse effects exists, begin formal consultation as soon as possible.

Suitable- Unoccupied Habitat

• Evaluate new or existing BLM plans, authorizations, or activities to determine whether they may affect SWIFL by degrading or eliminating the suitable characteristics of the habitat for the species. Make adjustments to avoid adverse effects and/or to benefit the species. Monitor to ensure adjustments are effective. If no alternative to adverse effects exists, begin formal consultation as soon as possible.

Potential Habitat

Evaluate new or existing BLM plans, authorizations, or activities to
determine whether they may affect SWIFL by diminishing or eliminating
regeneration or recruitment of woody vegetation needed by the species.
Make adjustments to avoid adverse effects and/or to benefit the species.
Monitor to ensure adjustments are effective. If no alternative to adverse
effects exists, begin formal consultation as soon as possible.

Refer to the guidance criteria for grazing permit effects determinations for the SWIFL (Appendix 7 in IM No. AZ-99-012, *Plan for Implementing the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration*) to assist in avoiding adverse effects.

Cowbird Control

To reduce the likelihood of nest abandonment and loss of flycatcher productivity owing to cowbird parasitism associated with BLM-authorized grazing activities in or near occupied habitats, implement the following:

- Investigate and identify livestock concentration areas in areas that are likely foraging areas for brown-headed cowbirds within a 5-mile radius of suitable southwestern willow flycatcher habitat, and evaluate ways to reduce any concentration areas found.
 - 1. Evaluate the presence or likelihood of cowbird concentration areas in the following habitats or sites, including but not limited to: riparian areas and livestock facilities such as feeding areas, waters, and corrals.
 - 2. Priorities for completion can be developed such that allotments with only suitable-unoccupied habitat follow those that have occupied or unsurveyed

habitat.

- If cowbird concentrations indicate that parasitism of flycatcher nests is occurring or actual parasitism is documented through nest monitoring, evaluate and carry out opportunities to reduce observed cowbird concentration areas in the following priority order:
 - 1. Modify grazing practices (i.e., season of use, relocation of facilities or concentration areas, etc.) within five miles of suitable SWIFL nesting habitat. See the grazing effects determination guidance criteria referred to in Habitat Management Guidelines for additional guidance.
 - 2. Initiate a cowbird trapping program in or next to cowbird concentration areas within five miles of suitable habitat if cowbird parasitism of flycatcher nests is documented or there is strong likelihood that parasitism may be occurring. Considerations in trapping are given below.
 - The rate and significance of cowbird parasitism on southwestern willow flycatchers may vary greatly. In some geographic areas the two species apparently co-exist with nest parasitism rates ranging from 15 to 30 percent of active nests. In other areas, where habitat fragmentation and degradation are a problem, nest parasitism rates approach 80 percent and too few young are produced to maintain the population.
 - Cowbird trapping could be a controversial measure that may require extensive public scoping and NEPA analysis prior to initiation. State and Federal permits would be required. Trapping represents a consistent, long term commitment to BLM in terms of funding for materials, labor, and training; availability of personnel; public outreach; and continuity of the trapping effort. These efforts must be coordinated with the Service and the U. S. Animal and Plant Health Inspection Service (APHIS). Managers may choose to contract with APHIS or another entity for this work, should it become neces sary.

Implementation Schedule

Priorities	Complete By

Mapping

1. Designated Critical Habitat,			
areas with known or historic SWIFL nests,			
or areas with known suitable or potential			
habitat. Digitized maps.			

2. Remaining areas with potential habitat Digitized maps.

3. Submit mapping status sheet

Surveys/Monitoring

1. Complete initial list

2. All areas committed to or identified in

BLM proposed actions or Biological Opinions

3. Other suitable habitat

Management Guidelines

1. Suitable-Occupied & Unsurveyed habitat 2. Suitable-Unoccupied habitat 3. Potential habitat

Cowbird Management

1. Evaluate Suitable-Occupied and Unsurveyed December, 1999-SWIFL habitat December, 2000 3. Evaluate Suitable-Unoccupied SWIFL habitat December, 2001 4. Modify practices or facilities December 2000-

(Within a year of evaluation) 2002

5. Trapping As need is identified

December, 1999

December, 2000

December, 1999

and

December, 2000

July, 1999

as stated in

appropriate documents

September, 2000

December, 2000 December, 2001

December, 2002

Attachment 1. Instructions For SWIFL Habitat Classification And Mapping

HABITAT MAPPING

An interdisciplinary team should be used to conduct the evaluation of riparian areas using the habitat classification worksheet (Attachments 1 and 2). The team should be composed of at least one wildlife biologist familiar with the characteristics of SWIFL habitat, one range specialist, and other personnel as determined by resource issues associated with the area.

River systems should be divided into smaller units called reaches or segments to provide more specific location information for habitat patches. Surveyors should use existing reach designations that may have been set up for proper functioning condition analyses or other inventories. If new river reaches must be designated, use topographic maps and aerial photos if necessary. Starting at the upstream end of the riverine system, break reaches at vegetation boundaries, major changes in channel or floodplain width, elevation or channel morphology, and administrative boundaries such as allotments or county or state boundaries. Scale is an important consideration. The detail indicated below may not always be necessary, but the intent is that sufficient detail be used that all reaches with habitat are identified and BLM can make management decisions based on the data. If BLM does not manage in finer detail than a pasture, then knowing a lot about 5 acre habitat patches may not be of value. If detailed activity (ROW corridor) is anticipated, then finer detail may be warranted. The most important thing is to know whether habitat occurs within the mapped area and to what extent. With sufficient recent information in the form of riparian monitoring data, photos, riparian functioning condition worksheets, aerial photographs, and personal knowledge, mapping in some areas could potentially be accomplished in the office and spot-checked or ground-truthed.

The habitat mapping team should take several copies of the worksheet and reproductions of topographic maps into the field for each reach evaluated. Map all evaluated habitat patches on a USGS topographic map while in the field. From a vantage point above the floodplain, observers should view the extent of the patch and delineate the boundaries on a copy of the topographic map. The team should enter the interior of the patch to conduct the habitat classification.

The team should begin evaluating the patch using the habitat classification worksheet. Evaluate every patch of suitable habitat on a separate worksheet. Use one worksheet to evaluate similar patches of potential or unsuitable habitat that occur in the same locality but are not adjacent.

Once the worksheet is completed, establish photo points and take photographs facing upstream, downstream, and of the entire patch. Note the position and orientation of photo points on the topographic maps. Permanently mark actual photo point locations at the site to help relocating the identical points for future photos. To properly evaluate habitat changes, photograph points during the same time of year, time of day and same focal length as the original photos. A Photo Identification Label, including date, allotment, location, photo number, and observers, should be placed upright so that it would appear in the foreground of the photo. Store all photos with their corresponding data sheets. Attachment 1 provides detailed instructions for filling out the habitat classification worksheet.

After returning to the field office, digitize the mapped habitats by category and photo points on the appropriate 7.5 minute digital rastor graphics (DRG) topographic quad maps using the ArcView GIS software program.

All habitat mapping within the area administered by a Field Office should be completed as soon as possible. SWIFL habitat classification is a prerequisite to all other management actions in this plan. Mapping should be periodically maintained through vegetation monitoring. This is necessary to ensure maintenance of suitable habitat and improvement in potential habitat. See the implementation schedule for priorities. Keep status information up to date in Attachment 3.

HABITAT CLASSIFICATION

SWIFL habitat categories are generally defined by the structure and density of the vegetation present and the capability of the surrounding landform to support that vegetation. These categories are updated each year as new information becomes available and SWIFL habitat needs are better understood. For classification and mapping, SWIFL habitat is divided into two categories: suitable or potential. A Habitat Mapping and Classification form is included in Attachment 2.

A. Characteristics of Suitable Habitat:

Suitable habitat includes all of the necessary physical and vegetative components necessary to support SWIFL nesting. Suitable habitat is characterized by the following:

- 1. Broad, well-developed flood plain supporting tree and shrub patches extending more than three or four trees in width from the active channel (Tucson Field Office has found territorial birds sometimes in patches one or two tree widths from the active channel).
- 2. Tree and shrub patches are generally irregular, block or linear in shape. If block shaped, minimum patch size is 0.2 ha (0.5 acres). If linear in shape, minimum patch size is at least three meters (15 feet) wide by 40 meters (200 feet) long.
- 3. Trees and/or shrubs are greater than or equal to 1.8 meters (nine feet) in height, of different ages and heights in communities with mixed native and exotic species (greater than or equal to 2.5 meters (12 feet) with no distinct overstory layer for monotypic habitats). Canopy layers are primarily closed, often composed of many layers (except monotypic habitats). Vegetation from ground level to 1.2 meters (six feet) is mostly impenetrable and difficult to see through.
- 4. Frequent scouring events, flood control efforts, or channelization due to natural occurrences (or manmade occurrences outside BLM administrative authority) is not preventing the establishment of trees and shrubs.
- 5. Surface water or saturated soil is present within 60 meters (300 feet) during the spring growing season (May to mid-June) to maintain riparian vegetation.

Suitable habitat is further subdivided into occupied, unoccupied, or unsurveyed, depending upon whether surveys have been conducted and birds were detected. Suitable - occupied (occupied) habitat is a contiguous area with consistent physical and biotic characteristics where territorial males or pairs of flycatchers have been documented during more than one survey with one detection after June 10 (according to accepted protocol) in the current or any previous breeding season(s), and the habitat has not been degraded or otherwise altered in the interim. Areas where nesting SWIFL were confirmed in previous years should be considered occupied from that point in time forward, unless its suitability is altered by an outside event or succession. If a portion of the contiguous habitat was or is used, the entire contiguous area (patch) is considered occupied. Suitable - unsurveyed areas are considered occupied for management purposes.

B. Characteristics of Potential Habitat:

Potential habitat for the southwestern willow flycatcher includes those areas, typically in broad floodplains where, absent other limiting factors, conditions allow for establishment and maintenance of riparian trees and shrubs as described in Sogge *et al.* (1997). Tree and shrub patches should be capable of extending more than three or four trees in depth from the active channel. Narrow canyons, where frequent scouring occurs as a result of physical characteristics of the drainage, are not potential habitat. High gradient streams should not be ruled out if they have the potential for development of backwater and associated riparian areas at least 0.5 ha in size. Absent other limiting factors, potential flycatcher habitat typically exists near or in standing water, cienegas, marshy seeps, or moist soil, particularly early in the breeding season. However, hydrological conditions in the Southwest can vary remarkably within a season and between years, so hydrological assessments should be made on the expected range of conditions, absent other limiting factors. Potential habitat is generally characterized by the following:

- 1. Broad, well-developed flood plain that supports tree and shrub patches extending more than three or four trees in width from the active channel.
- 2. Trees and/or shrubs are less than 1.8 meters (nine feet) in height, of almost uniform heights in communities with mixed native and exotic species (less than 2.5 meters (12 feet) in monotypic habitats). Width of patches may be less than three trees or three meters (15 feet). The canopy layer is mostly open or absent, with one or more layers missing. The lower 1.2 meters (six feet) includes openings that allow for greater visibility and movement through the patch.
- 3. Patch shape may be block or linear. Patch size is less than 0.2 ha (0.5 acres) if block shaped or less than three meters (15 ft.) wide or 40 meters (200 feet) long if linear, but can reach \geq 0.2 hectares (0.5 acres) or \geq 3 meters (15 ft.) X 40 meters (200 feet). Vegetation is likely to attain suitable characteristics within 3-10 growing seasons.
- 4. Frequent, scouring flood events due to natural occurrences (or outside BLM administrative authority) is not preventing the establishment of trees and shrubs.

5. Surface water or saturated soil is present within 58 meters (280 feet) during the spring growing season (May-mid June) to maintain riparian vegetation.

Habitat Classification Worksheet

The habitat classification worksheet is divided into three sections: Site Information, Site Capability, and Existing Conditions. Specific instructions for filling out the worksheet are included below:

Site Information

- 1. Enter the date in the space provided.
- 2. Leave the overall classification blank until after completing the habitat classification worksheet.
- 3. Enter the name of the field office.
- 4. Enter the name of the riparian area or drainage where the patch being classified is located (e.g. Kanab Creek).
- 5. Fill in the reach (or segment) number as described below. Enter the location information by noting the distance and direction from local place names as identified on U.S.G.S. topographic maps (e.g. 4 mi. SE of Littlefield, AZ). Use assigned patch numbers and/or river miles if available.
- 6. Enter the elevation in feet.
- 7. Enter the name of the topographic map where the patch being mapped is found.
- 8. Estimate of the patch size in acres or enter the size after the patch has been digitized.
- 9. Note the names of the team members participating with the habitat classification.
- 10. Use "Y" or "N" to indicate if SWIFLs have previously been detected in the patch, if tamarisk is present, and if brown-headed cowbirds are observed.

Site Capability

- 1. Answer "Y" for yes or "N" for no to indicate if the floodplain is physically wide enough to accommodate a minimum patch size (0.5 acres if in a block or at least 15 feet wide by 200 feet long if linear). Note that answering No to this question makes this patch unsuitable as SWIFL habitat. Complete the form even if you answer No to this question.
- 2. Answer "Y" for yes or "N" for no to indicate if the site shows signs of scouring floods (due to conditions outside the Bureau's regulatory authority) of sufficient frequency and magnitude which would prevent the establishment and maintenance of suitable habitat. This means that high energy flood events scour the habitat to minimal vegetation or bare rock at least once every ten years. Note that answering Yes to this question makes this patch unsuitable as SWIFL habitat. Complete the form even if you answer Yes to this question and describe the frequency and magnitude of the scouring flood events.
- 3. Answer "Y" for yes or "N" for no to indicate if there is surface water or saturated soil present during the growing season so that riparian vegetation is supported. This is especially important during the early part of the SWIFL breeding season (typically May through mid-June). Note that answering No to this question does not necessarily makes this patch unsuitable as SWIFL habitat.
- 4. Answer "Y" for yes or "N" for no to indicate if there are any other factors that my be

limiting the site from becoming suitable. This might include such things as dewatering, high terrace areas that are only periodically inundated, etc. Complete the form even if you answer Yes to this question.

Existing Conditions

- 1. Indicate with an "X" the habitat type that best describes the conditions in the patch being evaluated. If none of the categories is applicable, put an "X" beside the other category and describe the conditions.
- 2. For each attribute described, read through the descriptions of suitable and potential habitat, describe the patch being evaluated in the existing conditions box, and circle the classification. Existing conditions that at the low end of potential or which the team feels will require more than ten growing seasons to reach should be classified as unsuitable.

Overall Classification

Review all the attribute classifications. If the team has classified all as suitable, then the overall classification is suitable. If one or more attributes were described as anything other than suitable, the overall classification cannot be considered suitable. If one or more attributes is unsuitable, then the overall must be classified as unsuitable. All other classifications fall into the potential classification. The team must then determine if the potential habitat patch can reasonably be expected to achieve suitability within one to three growing seasons. If so, the habitat should be classified as short term potential (P3). If the potential habitat patch can reasonably be expected to achieve suitability within four to ten growing seasons, the habitat should be classified as long-term potential (P10). Enter the overall classification by placing an "X" next to the appropriate classification and on the front of the worksheet.

Attachment 2. Southwestern Willow Flycatcher Habitat Classification Worksheet

Date	Overall Classification				
Field Office					
Name of Riparian Are	ea Reach Number				
Location (local name / river	mile/ patch number) Elevation				
Topo Map Name	Patch Size (acres /dimensions)				
Observer(s)					
Historic SWIFL Use? Tamarisk (Saltcedar) Present? Cowbirds Detected?					
	SITE CAPABILITY				
Floodplain Width	Is the floodplain wide enough that a minimum size habitat patch* could develop to support a breeding pair of willow flycatchers? Y or N If NO , the site is not SWIFL habitat				
Frequency of Scouring Flood Events: Does the site show signs of scouring floods** of sufficient frequency growing seasons) and magnitude to prevent the maturation and maint suitable habitat?					
	Y or N If YES , the site is not SWIFL habitat				
	If YES , describe: frequency, magnitude, and other related conditions associated with these scouring events:				
Availability of Surface Water:	Is surface water or saturated soil present (within 280 feet) during the spring growing season (May-mid June) to maintain riparian vegetation?				
	Y or N If NO , the site may not be Unsuitable as SWIFL habitat				
	Describe factors other than surface water which may be limiting the site from becoming or remaining suitable habitat: (e.g. late seral stage, salinity, water diversion, impoundments, planned or existing flood control projects*** etc.):				

- Minimum block patch size= 0.5 acre or if linear patch =15 ft. X 200 ft.
- ** Flooding due to conditions outside BLM regulatory authority
- *** There are BLM-administered lands in which substantial riparian alterations (channelization, flood control, water storage, power generation, or agricultural irrigation) occur which are outside the BLM's regulatory authority.

Attachment 2. (Continued)

Existing Conditions				
Habitat Type				
	Monotypic Exotic - Nearly monotypic dense stands of exotics such as saltcedar or Russian olive. Mixed Native/Exotic - Dense mixtures of native broadleaf trees (cottonwood, willows, ash, etc. mixed with exotics (saltcedar, Russian olive, etc). Exotics most often in understory. Native Broadleaf Dominated - Single species of Gooding or other willow or mixtures of native broadleaf trees and shrubs including cottonwood, willows, ash, mesquite, etc. Monotypic High Elevation Willow - Nearly monotypic, dense stands of willow above 7,000 feet elevation. Often associated with sedges, rushes, nettles, and other herbaceous wetland species. Other - (Describe)			

Attributes	Suitable	Potential	Existing	Classi	fication
Height	≥ 9 ft. with trees of different ages and heights (≥ 12 ft. with no distinct overstory layer for Monotypic habitats)	<9 ft. trees of uniform age and height (< 12 ft. with or without overstory for Monotypic habitats)		S	P
Width	\geq 3 trees or \geq 15 ft.	\leq 2 trees or \leq 15 ft.		S	P
Canopy Density	Mostly closed canopy, often with many layers except for monotypic types (High Elevation Willow habitats)	Canopy mostly open, one or more layers absent	% exotics =	S	P
Understory Density	Lower 6 ft. Mostly impenetrable, difficult to see through	Lower 6 ft. With openings	% exotics =	S	P
Patch Size	Block Shape: ≥ 0.5 acres - or - Linear Shape: Habitat must be at least 15 ft. wide and 200 ft. long.	Block Shape: <0.5 acres - or - Linear Shape: Habitat less than 15 ft. X 200 ft. long.		S	P

OVERALL CLASSIFICATION: I	ndicate the overall classification of habitat below:
Suitable	
Potential	
Not SWIFL Habitat	

Attachment 3. Status of Southwestern Willow Flycatcher Habitat Mapping

Field Office:	Year:
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Riparian Area	Allotment Where Applicable (One line for each allotment)	Acres of Habitat by Category*		Date of La Mapping or
		Suitable	Potential	if Area is No Mapped